UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

September 9, 2014

David Copeland
Acting President and Chief Executive Officer
Florence Copper, Inc.
1575 W. Hunt Highway
Florence, AZ 85132

RE: Class III Underground Injection Control Well Permit Application
Florence Copper, Inc.

Dear Mr. Copeland:

The United States Environmental Protection Agency, Region IX (EPA) has reviewed the revised Class III UIC Permit application dated August 2014 (the UIC Permit application) and comments submitted by Florence Copper, Inc. (FC) in response to EPA's July 11, 2014 Request for Information (RFI). Nancy Rumrill of my staff and our contractor have also discussed this latest submittal with Dan Johnson, and identified for him a few items that require clarification. These items are described below.

1. In Attachment C of the UIC Permit application, the two core holes drilled in 2011 were added to Table C-1. The status of these core holes should note they are abandoned. Also, the driller's logs provided for these core holes did not include a record for cementing of the intermediate casing. Further, the CMP11-06 core hole was reported as plugged with cement from the surface to 352 feet inside the casing; however, the casing was set to a depth of 429 feet, which is below the Lower Basin Fill Unit (LBFU). Please provide a more detailed description and schematics of the construction and plugging records, so that we may determine the necessity of any potential corrective action.

2. Four other core holes, MCC367, MCC368, MCC535, and MCC561, have no record of a cemented annulus. Please provide a more detailed description and schematics of the cementing and plugging history of these core holes if that information is available. As discussed with Dan, these core holes may require some corrective action (i.e., placing cement at the base of the USDW) if there is not a clear record of a cement seal behind the casing.

3. Please provide a more complete description and a schematic of the construction and plugging record for the DM-B well, if that information is available.

4. In Attachment H, Section H.3, Rate and Volume of Fluid to be Injected, please clarify discussion of the proposed total injection rate of 240 gallons per minute (gpm) and recovery rate of 300 gpm, and how those rates relate to the proposed average injection rate of 0.15 gpm/ft of injection interval and maximum injection rate of 0.20 gpm/ft and the initial minimum extraction to injection volume ratio of 110 percent. Also, please confirm the discussion aligns with the description of these rates and volumes in Attachment K and the Operations Plan in Exhibit K-2 and Table H-1 as discussed below.

5. Table H-1, Injection Rates and Volumes: The typical length injection interval of 580 feet and typical injection rate of 0.15 gpm/ft yield a total rate of 348 gpm in four injection wells in the PTF, however Table H-1 notes a planned total injection rate of 240 gpm. Please clarify and note that the initial minimum extraction:injection volume ratio is 110 percent, subject to change with prior EPA approval.

6. Please clarify the type of casing to be installed in the operational, multi-level sampling, operational monitoring, and supplemental monitoring wells. Your response to RFI comment 10 states that those wells "will not have steel casing installed to bedrock, unless the well extends to the top of bedrock or deeper." However, proposed well designs depicted in figures M-3, M-4, 9A-3, and 9A-4 (in Attachments O and P) indicate these wells will be drilled and screened into the bedrock and have fiberglass reinforced casing.

7. Attachment P, Exhibit P-2, Figure M1-1, Operational Monitoring MW-01 Proposed Well Design: The casing design requires clarification because steel casing is specified through the upper portion and PVC casing is specified in the lower segment of the deeper well through the LBFU but a steel to PVC adapter is shown connecting to the PVC screen in the Oxide unit. Please clarify or correct that depiction. Please also add a LBFU label and Oxide label to the upper and lower screened intervals, respectively in this figure.

8. Attachment R, Exhibit R-1, Closure and Post-Closure Cost Estimates: As discussed with Dan Johnson, the total cost estimates presented in Table 5-2 do not include the BHP test wells and facilities presented in Table 5-2a. Please update Attachment R accordingly, and also include documentation of any other existing financial assurance.

9. Plugging and Abandonment Plans for Proposed PTF Wells and AOR Monitoring wells: The information presented on the EPA P&A Plan forms should not include cement volumes and estimated costs to construct the wells. The forms should only cite calculated cement volumes required to plug the wells and estimated abandonment costs.

10. Attachment S, Section S.4, Proposed Aquifer Exemption: Please delete "proposed" in the section header and the text and add "original" before "Area of Review" in the first sentence for clarity. Please delete reference to the figures in Attachment D in that sentence since the lower limit of the exempted zone is not depicted in those figures. Please include reference to the boundary limits as "*The vertical limits of the aquifer exemption are depicted in Figure S-2 and the lateral and vertical limits are described in Exhibit S-1.*"

These items should be addressed by providing two copies of any revised or additional pages to insert into the August 2014 UIC Permit application, and an updated electronic copy to:

Attn: Nancy Rumrill
U.S. EPA Region IX, (WTR-3-2)
75 Hawthorne Street
San Francisco, CA 94105

If you have any questions regarding this letter, please contact me at 415-972-3971 or call Nancy Rumrill at 415-972-3293.

Sincerely,

David Albright
Manager, Ground Water Office

Cc (via e-mail): Jerry Smit, ADEQ
Dan Johnson, VP, General Manager, Florence Copper, Inc.